

Work Order ID 58001

April 21, 2010 12:54:27 PM



Page 1

Item ID: D412-702-121B

Accept



Setup Start



Revision ID:

Item Name: Harness Assembly

Stop



Start Date: 21/04/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 28/04/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals:

Process Plan:

[Signature]

Date:

10-4-21

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

DSI 9469

A

0.00

0.00

0.00

0.00

0.00

0.00

50



DC

Document Control

Memo

Photocopy bluefile & type labels per PPP D412-702-121B / DSI 9469
CHG001

N/A

100



Packaging

Packaging

Pick Kit

Memo

ES 10/04/26

110



Small Fab

Small Fab

Memo

Assemble as per DSI9469

ES 10/04/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 58001

Page 2

April 21, 2010 12:54:27 PM

Item ID: D412-702-121B

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Revision ID:

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Start Date: 21/04/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 28/04/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00

Diobulke



QC

Memo

0.00

Quality Control



130

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D412-702-123B / DSI 9469

Location: 274

PPP rev: _____

10-4-26 SF



140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/04/27

10-4-26

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

April 21, 2010 12:54:31 PM

Page 1

Work Order ID: 58001

Parent Item: D412-702-121B

Parent Item Name: Harness Assembly


Comments:

Start Date: 21/04/2010

Required Date: 28/04/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3570-3  Bracket		Manufactured	No				Each	16.0000	1.0000			

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST245A

16

52885

1 16

Each

2.0000

1.0000

D3579-047



Shoulder Harness

Manufactured

No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST273

2

55682

2

Each

122.0000

4.0000

MS24694-S50



Screw

Purchased

No

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST289

122

113538

122

EP 10/04/26

EP 10/04/26

EP 10/04/26

4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 2

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Parent Item Name: Harness Assembly

Comments:

Start Date: 21/04/2010

Required Date: 28/04/2010

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN960JD10L

Purchased

No

Each

4,445.000

4.0000



Washer QSI 017

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST348

4445

110985

4445

Each

1,089.000

1.0000

MS21042L3

Purchased

No



Nut

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST300

1089

113537

105

113644

984

Each

2.0000

1.0000

D3569-3

Manufactured

No



Decal

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST245A

2

56385

2

April 21, 2010 12:54:31 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3
REF TCCA STC: SH04-7
REF FAA STC: SR01997NY
REF EASA STC: EASA.IM.R.S.00710

SUBJECT TO ORDER
WITHOUT NOTICE
WORK ORDER
NO. 5001
P10-4-24

PURPOSE:

Update the D412-702-041A/045A/-041B/-045B kits for compatibility with the Dart D412-769-011 Aft Facing Seat Kit.

CHANGE:

Quantity (1) each of D412-702-111A/-113A is replaced with D412-702-121A/-123A. Also Qty (4) x AN4-27A bolts are added to the kits for compatibility with the Dart seat. When installing the AN4 bolts in the Dart seat, open the Ø0.188" holes to Ø0.257" (see sheet 4 detail J of this service instruction for reference). Alternate nuts added (see flag note 2 & 3, sheet 4). The parts list in section 25.28 (pg. 87) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 38) of IIN-D412-702 Rev. E is amended as follows:

QTY -041A	QTY -043A	QTY -045A	QTY -047A	QTY -049A	PART NUMBER	DESCRIPTION
X					D412-702-041A	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045A	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1		1			D412-702-111A	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-121A	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-3	BRACKET
1*		1*			D3579-043	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-1	DECAL
1		1			D412-702-113A	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-123A	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-4	BRACKET
1*		1*			D3579-044	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-2	DECAL
4		4			AN4-27A	BOLT (NEW)

WAS:

2		2			D412-702-111A	HARNESS ASSEMBLY
-2		-2			D412-702-113A	HARNESS ASSEMBLY

* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-Q-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.01.13
CERT. NO.: SH04-7
ISSUE NO.: 3

C	UPDATE MS51865-6C ACORN NUT QUANTITY	JPH	10.01.13
B	ADD FLAG NOTE 2 & 3 AND OPEN AN3 HOLES TO AN4	CP	09.12.10
A	NEW ISSUE, NCR 09-068	CP	09.06.30
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>[Signature]</i>		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	AFT-FACING SEAT UPDATE	NTS
DATE	10.01.13	COPYRIGHT © 2009 BY DART AEROSPACE LTD. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O 58009

The parts list in section 25.28 (pg. 93) of ICA-D412-702 Rev. 3 and section 7.0 (pg. 40) of IIN-D412-702 Rev. E is amended as follows:

QTY -041B	QTY -043B	QTY -045B	QTY -047B	QTY -049B	PART NUMBER	DESCRIPTION
X					D412-702-041B	Dart 13-Man 3-Point Shoulder Harness Kit
		X			D412-702-045B	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit

IS:

1		1			D412-702-111B	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-121B	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-3	BRACKET
1*		1*			D3579-047	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-3	DECAL
1		1			D412-702-113B	HARNESS ASSEMBLY (EXISTING)
1		1			D412-702-123B	HARNESS ASSEMBLY (NEW)
1*		1*			D3570-4	BRACKET
1*		1*			D3579-048	SHOULDER HARNESS
4*		4*			MS24694S50	SCREW
4*		4*			AN960JD10L	WASHER
1*		1*			MS21042L3	NUT
1*		1*			D3569-3	DECAL
4		4			AN4-27A	BOLT (ADD)

WAS:

2		2			D412-702-111B	HARNESS ASSEMBLY
2		2			D412-702-113B	HARNESS ASSEMBLY

* DENOTES THAT PART IS INCLUDED WITH ASSEMBLY ABOVE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

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MFG. APPR.	N/A	DSI 9469	SHEET 2 OF 5
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W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

WLO 58007

Figures 4.8 (pg. 25) of IIN-D412-702 Rev. E and 25.12 (pg. 69) of ICA-D412-702 Rev. 3 are updated as follows:

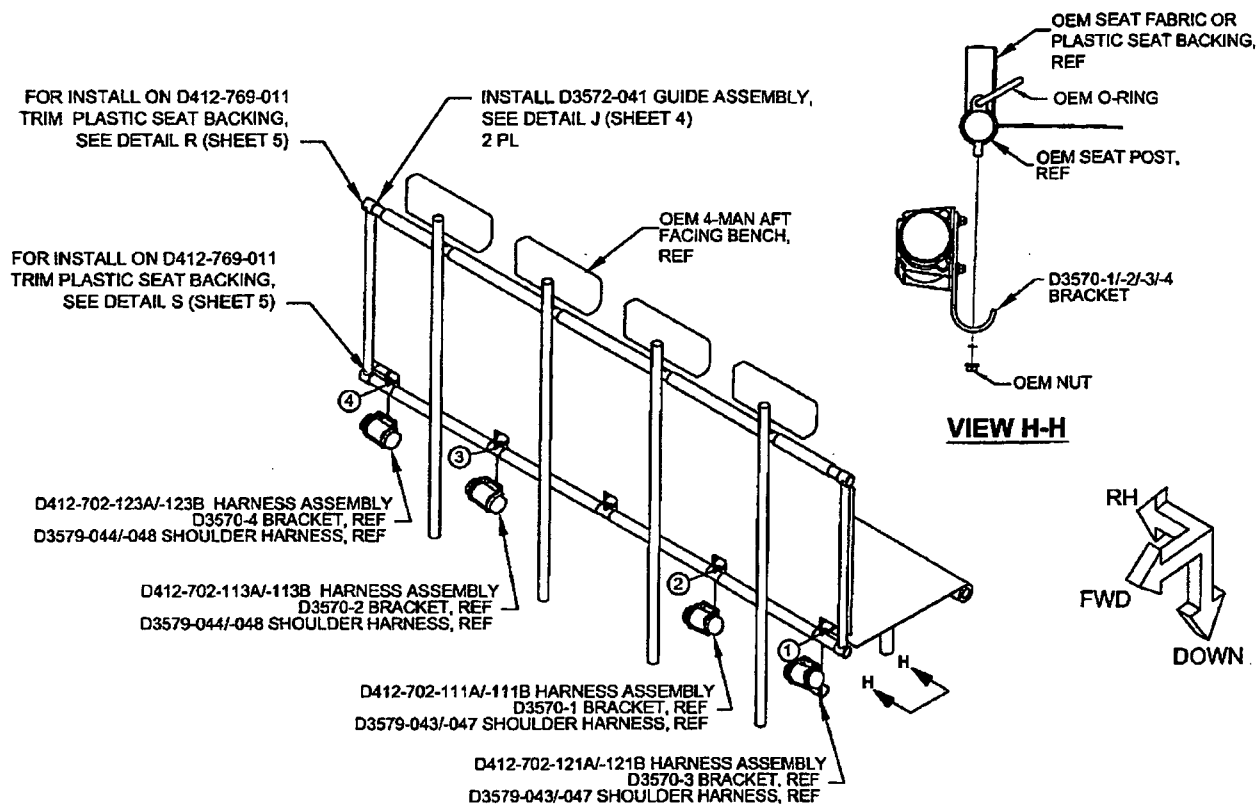


FIGURE 4.8. SHOULDER BELT INSTALLATION
FIGURE 25.12 D412-702-045A/-045B 4-MAN 3-POINT AFT FACING SHOULDER HARNESS KIT

CANADA
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BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)
DATE: 10.01.13
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
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MFG. APPR.	N/A	DSI 9469	SHEET 3 OF 5
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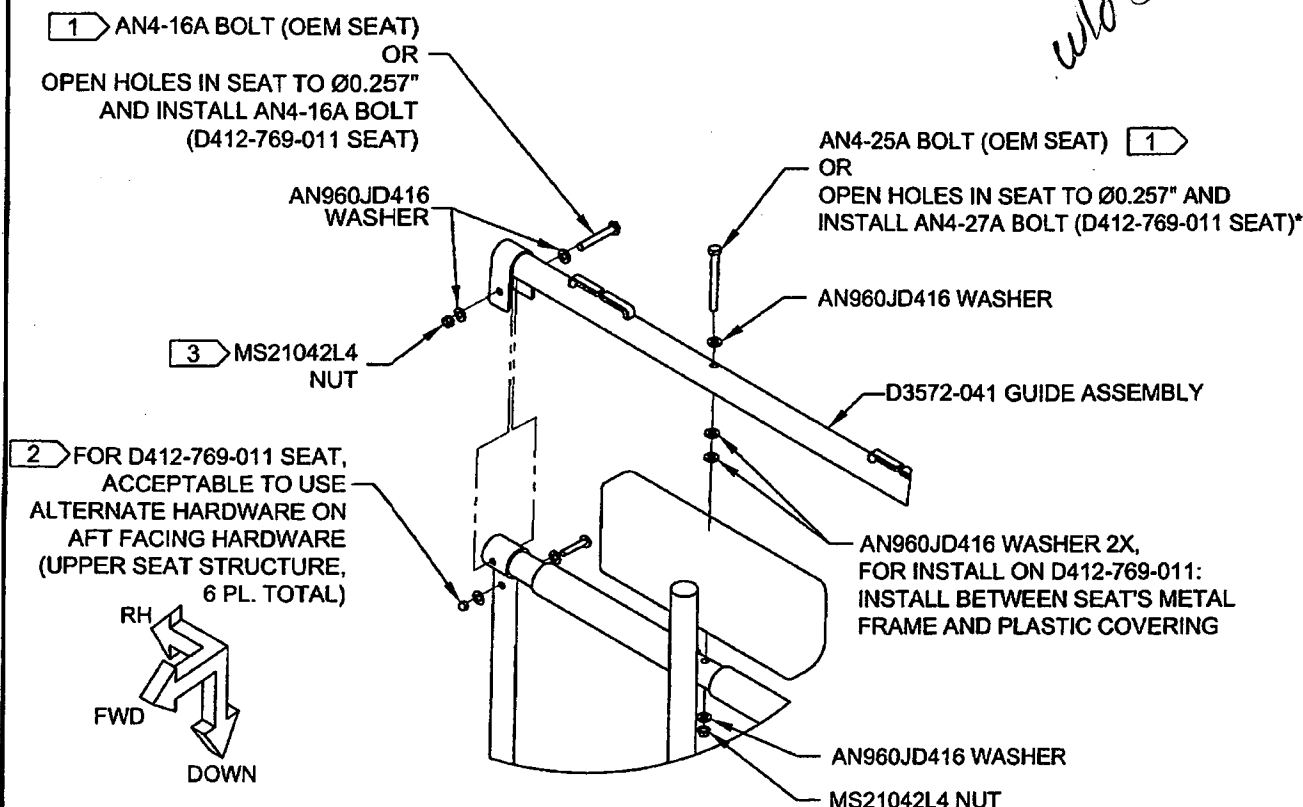
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WLB 8001



DETAIL J: D3572-041 INSTALLATION
(RH SHOWN, LH OPPOSITE)

- 1 ACCEPTABLE TO USE LONGER/SHORTER AN4 BOLTS, ADD ADDITIONAL AN960JD416 WASHERS, OR SUBSTITUTE AN960JD416L WASHERS TO ENSURE 1.5-2 THREADS IN SAFETY
- 2 ACCEPTABLE TO USE MS51865-8C AS ALTERNATE NUT (6 PLACES TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD AN960JD10/10L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE PROTRUDING THREADS MEASURE 0.160 MIN, 0.190 MAX. (BEFORE NUT INSTALLATION)
- 3 ACCEPTABLE TO USE MS51865-8C AS ALTERNATE NUT (2 PLACES TOTAL PER D412-769-011 SEAT KIT). IF ALT NUT IS USED, ADD AN960JD416/416L WASHER AS REQD (HEAD BOLT SIDE) TO ENSURE PROTRUDING THREADS MEASURE 0.200 MIN, 0.250 MAX. (BEFORE NUT INSTALLATION)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.01.13
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 4 OF 5
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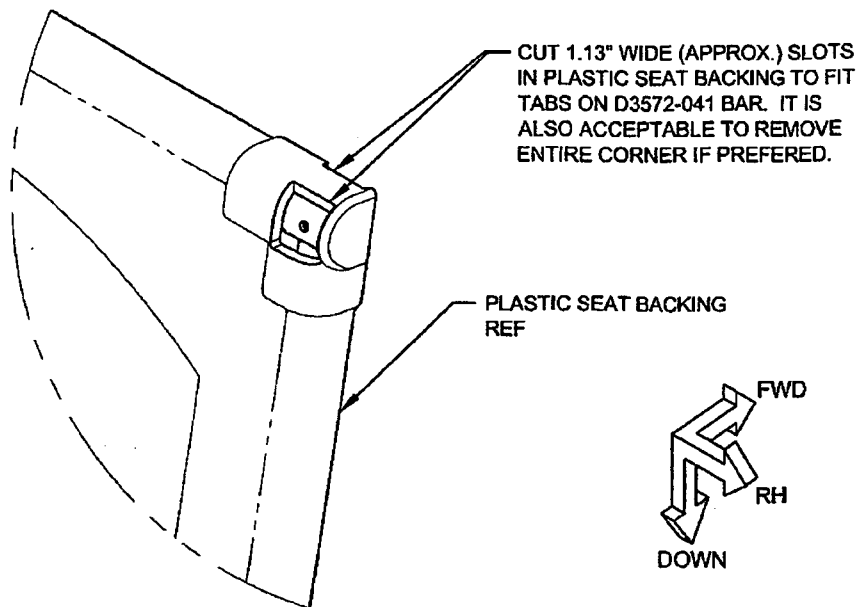
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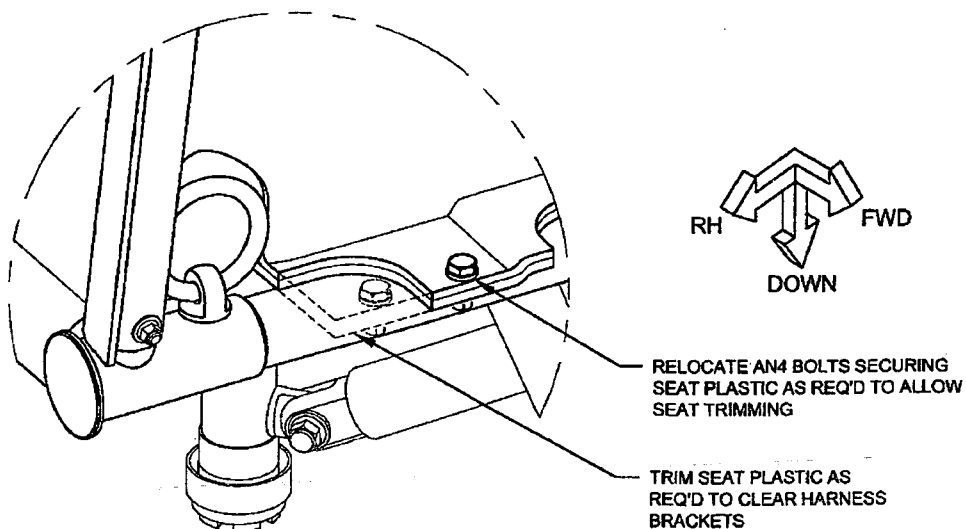
NOTE: Date & initial all entries

w/05800



DETAIL R

VIEW LOOKING AT FRONT OF SEAT BACKING, TOP-RH CORNER SHOWN (TOP-LH CORNER SIMILAR),
FOR INSTALL ON D412-769-011 ONLY



DETAIL S





VIEW LOOKING AT REAR OF SEAT, BOTTOM-RH CORNER SHOWN (BOTTOM-LH CORNER SIMILAR),
FOR INSTALL ON D412-769-011 ONLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE #02)

DATE: 10.01.13
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DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.	N/A	DSI 9469	SHEET 5 OF 5
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